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SUPERFUND

THIRD QUARTER 1992 GROUND WATER SAMPLING RESULTS LIVINGSTON RAIL YARD LIVINGSTON MONTANA

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**Montana Department of Health and
Environmental Sciences**
Solid and Hazardous Waste Bureau
Cogswell Building
Helena, Montana 59620

Submitted by:

Burlington Northern Railroad Co.
9401 Indian Creek Parkway
Overland Park, KS 66201

Prepared by:

Envirocon, Inc.
P.O. Box 8243
Missoula, Montana 59807

Submittal Date:

November 11, 1992

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1.0 INTRODUCTION

This report presents the results of ground water samples collected during the third quarter of 1992. Ground water sampling for this quarter consisted of the August quarterly sampling event. The Montana Department of Health and Environmental Sciences (MDHES) approved Burlington Northern Railroad's May 1992 draft Ground Water Sampling Plan, which does not require ground water sampling during July or September.

2.0 RESULTS

The samples were analyzed by Energy Laboratories, Inc. in Billings, Montana. Results for the August 1992 quarterly sampling event are presented below.

2.1 August 1992 Quarterly Ground Water Sampling Event

The August 1992 quarterly sampling event was conducted on August 27 through September 1, 1992. Twenty-two samples were analyzed as part of this event: twenty samples were primary and duplicate samples collected at monitoring wells within and around the Livingston Rail Yard, and two samples were trip blanks. All samples were analyzed for purgeable halocarbons by EPA Method 601. Tables 1, 2, 3, and 4 summarize quarterly analytical results for tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE), and chlorobenzene. Laboratory analytical results and a data validation report for this sampling event are in Appendix A.

Most of the ground water samples collected during the August 1992 quarterly sampling round contained dissolved chlorinated VOC concentrations



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that continued the general decline observed during the past three years. A few notable sample results are described below.

The PCE concentration in the sample from Monitoring Well 89-3 was 170 parts per billion (ppb). Well 89-3 is located immediately downgradient from the Electric Shop SVE system around the former degreasing area, as shown on Figure 1.0. This is a concentration decline from previous sample results and would be interpreted as resulting from removal of over 300 pounds of PCE from soil above the water table at this source area. However, the field duplicate sample contained a PCE concentration of 420 ppb. This poor correlation between primary and duplicate samples invalidates both samples. Further sampling will be necessary to determine the impact of the Electric Shop SVE system.

Well 92-1 is located immediately downgradient from the SVE system at the Locomotive Shop manways, as shown on Figure 1.0. The PCE concentration of 220 ppb in the sample from Monitoring Well 92-1 is significantly lower than concentrations found in previous quarterly ground water samples collected at this location. The previous two samples from this well, collected in February and May 1992, contained 850 ppb and 520 ppb of PCE, respectively. The August 1992 results probably reflect the removal of over 110 pounds of PCE from the upgradient source at the Locomotive Shop manways by SVE.

Monitoring Well 92-2 is located 160 feet east of the Yellowstone River, immediately south of the railroad tracks, as shown on Figure 1.0. As shown by the results in Appendix A, the August 1992 sample from this well contained 41 ppb of PCE, along with 18 ppb of DCE and 8.4 ppb of TCE. These concentrations are higher than those found in the only previous sample from this well, collected in May 1992. Further investigation is planned to determine

whether VOCs in the ground water on the east side of the river are due to sources east of the river or underflow of ground water beneath the river.

Monitoring Well 92-3 was installed in July 1992 along the railroad tracks near the intersection of Park and E Streets, as shown on Figure 1.0. The August 1992 sample from this well contained 1.2 ppb of PCE. This indicates that low concentrations of PCE are present in the ground water in this area. The source of these low detections is not presently known.

Monitoring Well 92-4 was installed in August 1992 to more accurately determine the position of the VOC plume boundary on the north side of the rail yard. Figure 1.0 shows the location of Well 92-4. The August 1992 sample collected from Well 92-4 contained only 2.2 ppb of PCE. No other chlorinated VOCs were detected. This result indicates that the north boundary of the plume is farther south than is shown on plume maps in the Draft Remedial Investigation Report.

Table 1: Tetrachloroethene Analytical Results for Ground-Water Samples Collected During the November 1991, February 1992, May 1992, and August 1992 Sampling Rounds, Livingston Rail Yard, Livingston, Montana.

Monitoring Well	Chemical Parameter: Tetrachloroethene		Units: ug/L		
	1991		1992		
	November Quarterly	February Quarterly	May Quarterly	August quarterly	
5	< 0.5 B	0.52 B	< 0.5 B	< 0.5 B	< 0.5 B
89-2	< 0.5 B	< 0.5 B	< 0.5 B	< 0.5 B	< 0.5 B
89-3	280.0 B	180.0 B	260.0 B	170.0 U	
89-4	210.0 B	240.0 B	210.0 B	160.0 B	
89-9	190.0 B	200.0 B	180.0 B	170.0 B	
90-6	-	-	< 0.5 B	0.54 B	
92-1	-	850.0 B	520.0 B	220.0 B	
92-2	-	-	15.0 B	41.0 B	
92-3	-	-	-	1.2 B	
92-4	-	-	-	2.2 B	
HRO-17	-	-	62.0 B	86.0 B	
L-87-2	0.83 B	2.2 B	-	< 0.5 B	
L-87-3	130.0 B	140.0 B	140.0 A	80.0 B	
L-87-5	160.0 B	150.0 B	-	160.0 B	
L-87-8	< 0.5 B	16.0 B	11.0 B	6.2 B	
L-88-10	65.0 B	115.0 B	-	71.0 B	
LS-11	8.0 B	38.0 B	75.0 B	14.0 B	
LS-8	40.0 B	74.0 B	73.0 B	66.0 B	

Table 2: Trichloroethene Analytical Results for Ground-Water Samples Collected During the November 1991, February 1992, May 1992, and August 1992 Sampling Rounds, Livingston Rail Yard, Livingston, Montana.

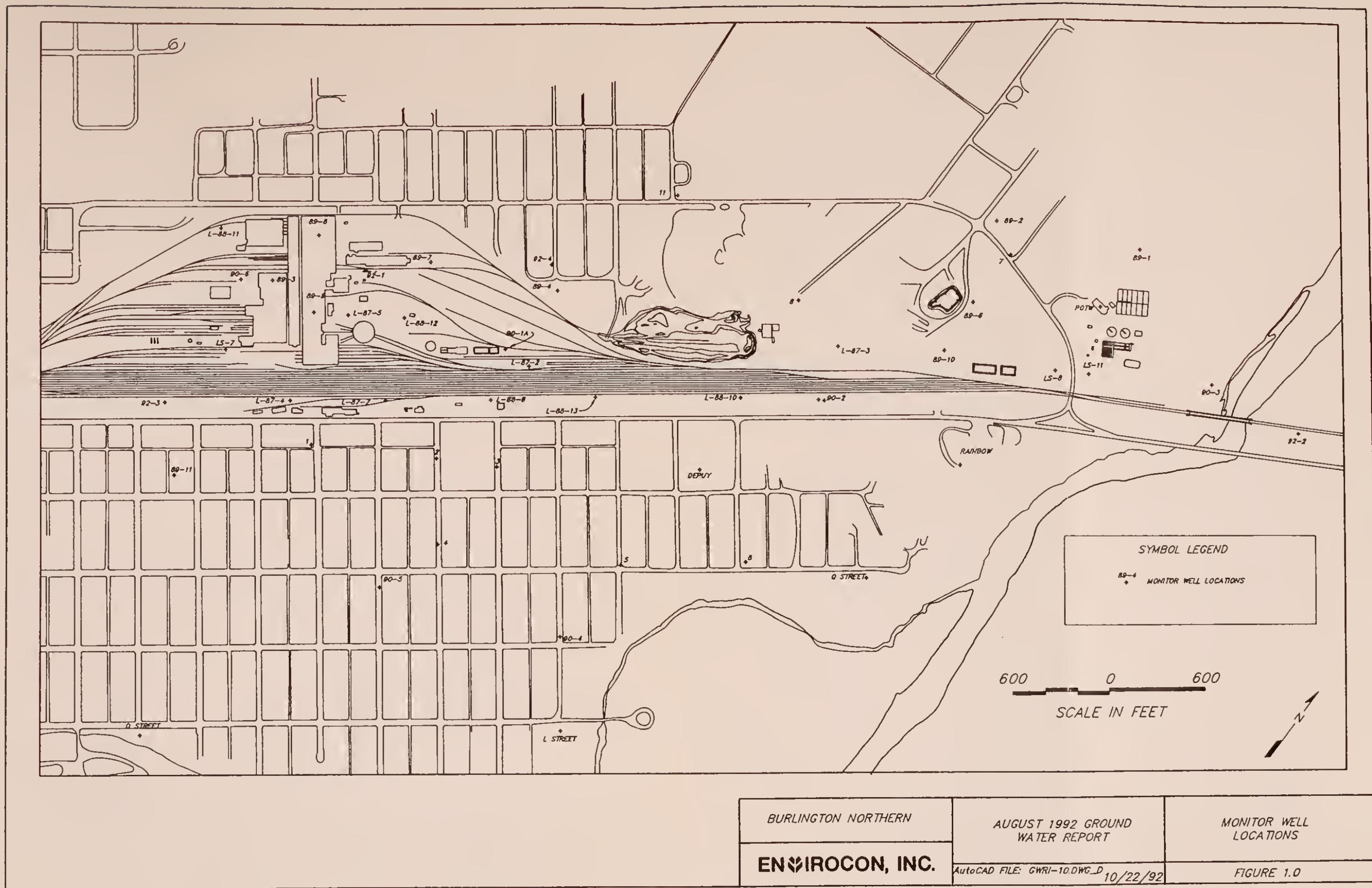
Monitoring Well	Chemical Parameter: Trichloroethene		Units: ug/L		
	1991 November Quarterly	1992 February Quarterly	May Quarterly	August quarterly	
5	< 0.5 B	< 0.5 B	< 0.5 B	< 0.5 B	< 0.5 B
89-2	< 0.5 B	< 0.5 B	< 0.5 B	< 0.5 B	< 0.5 B
89-3	< 0.5 B	0.58 B	0.8 B	0.9 B	
89-4	6.0 B	5.9 B	4.1 B	3.2 B	
89-9	6.9 B	6.1 B	8.3 B	9.1 B	
90-6	-	-	< 0.5 B	< 0.5 B	
92-1	-	0.76 B	0.8 B	< 0.5 B	
92-2	-	-	1.0 B	8.4 B	
92-3	-	-	-	< 0.5 B	
92-4	-	-	-	< 0.5 B	
HRO-17	-	-	5.3 B	16.0 B	
L-87-2	17.0 B	12.0 B	-	7.6 B	
L-87-3	10.0 B	12.0 B	14.0 B	9.7 B	
L-87-5	8.0 B	5.8 B	-	9.0 B	
L-87-8	5.9 B	7.0 B	2.6 B	0.93 B	
L-88-10	18.0 B	16.0 B	-	14.0 B	
LS-11	9.3 B	8.8 B	11.0 B	14.0 B	
LS-8	3.7 B	13.0 B	10.0 B	4.7 B	

Table 3: Cis-1,2-Dichloroethene Analytical Results for Ground-Water Samples Collected During the November 1991, February 1992, May 1992, and August 1992 Sampling Rounds, Livingston Rail Yard, Livingston, Montana.

		Chemical Parameter: cis-1,2-Dichloroethene		Units: ug/L	
Monitoring Well	1991 November Quarterly			1992	
		February Quarterly	May Quarterly	August quarterly	
5	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
89-2	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
89-3	< 1.0 B	< 1.0 B	1.0 B	1.0 B	
89-4	16.0 B	13.0 B	4.8 B	4.6 B	
89-9	1.3 B	< 1.0 B	1.2 B	3.3 B	
90-6	-	-	< 1.0 B	< 1.0 B	
92-1	-	4.5 B	7.7 B	12.0 B	
92-2	-	-	5.6 B	18.0 B	
92-3	-	-	-	< 1.0 B	
92-4	-	-	-	< 1.0 B	
HRO-17	-	-	8.4 B	9.5 B	
L-87-2	440.0 B	380.0 B	-	310.0 B	
L-87-3	16.0 B	57.0 B	52.0 B	17.0 B	
L-87-5	3.0 B	1.9 B	-	4.1 B	
L-87-8	16.0 B	12.0 B	2.0 B	1.0 B	
L-88-10	200.0 B	184.0 B	-	100.0 B	
LS-11	54.0 B	73.0 B	50.0 B	54.0 B	
LS-8	6.7 B	78.0 B	54.0 B	12.0 B	

Table 4: Chlorobenzene Analytical Results for Ground-Water Samples Collected During the November 1991, February 1992, May 1992, and August 1992 Sampling Rounds, Livingston Rail Yard, Livingston, Montana.

Monitoring Well	Chemical Parameter: Chlorobenzene		Units: ug/L		
	1991		1992		
	November Quarterly	February Quarterly	May Quarterly	August quarterly	
5	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
89-2	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
89-3	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
89-4	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
89-9	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
90-6	-	-	< 1.0 B	< 1.0 B	< 1.0 B
92-1	-	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B
92-2	-	-	< 1.0 B	< 1.0 B	< 1.0 B
92-3	-	-	-	-	< 1.0 B
92-4	-	-	-	-	< 1.0 B
HRO-17	-	-	560.0 B	840.0 B	
L-87-2	70.0 B	63.0 B	-	77.0 B	
L-87-3	< 1.0 B	< 1.0 B	< 1.0 B	1.1 B	
L-87-5	< 1.0 B	< 1.0 B	-	< 1.0 B	
L-87-8	< 1.0 B	< 1.0 B	< 1.0 B	< 1.0 B	
L-88-10	5.2 B	8.7 B	-	7.1 B	
LS-11	250.0 B	44.0 B	< 1.0 B	230.0 B	
LS-8	2.6 B	28.0 B	5.3 B	< 1.0 B	



BURLINGTON NORTHERN

ENVIROCON, INC.

AUGUST 1992 GROUND
WATER REPORT

AutoCAD FILE: GWRI-10.DWG_D
10/22/92

MONITOR WELL
LOCATIONS

FIGURE 1.0

APPENDIX A

DATA VALIDATION REPORT FOR GROUNDWATER ANALYSES

LIVINGSTON RAIL YARD, LIVINGSTON, MONTANA

AUGUST 1992 QUARTERLY SAMPLING ROUND

1.0 INTRODUCTION

Data validation levels have been established for the sample round according to the criteria described in Appendix 1.A of the Remedial Investigation Report. The data validation levels and codes for the Livingston Rail Yard project are based on the U.S. Environmental Protection Agency Region VIII guidance, "Evaluation Criteria for Existing Data from CERCLA Study Areas", Revision 1, January 5, 1985.

Table 1 lists all of the sample station names, sample dates, Envirocon field identification number, laboratory identification number, analytical methods and number of analytes per analytical method for the August 1992 quarterly sampling round.

Table 1: Groundwater medium analytical suites for samples collected from 08/27/92 to 09/01/92

Sample Station		Date	Envirocon ID#	Lab ID #	EPA
5	(PS)	09/01/92	140101-1140	92-36203	31
89-2	(PS)	08/27/92	140101-1120	92-33680	31
89-3	(PS)	09/01/92	140101-1138	92-36201	31
89-3	(FD)	09/01/92	140101-1139	92-36202	31
89-4	(PS)	08/27/92	140101-1122	92-33682	31
89-4	(FD)	08/27/92	140101-1123	92-33683	31
89-9	(PS)	08/27/92	140101-1124	92-33684	31
90-6	(PS)	08/28/92	140101-1130	92-33690	31
90-6	(LD)	08/28/92	140101-1130	92-33690	31
92-1	(PS)	08/28/92	140101-1133	92-33693	31
92-2	(PS)	08/28/92	140101-1129	92-33689	31
92-3	(PS)	08/28/92	140101-1131	92-33691	31
92-4	(PS)	08/28/92	140101-1128	92-33688	31
HRO-17	(PS)	09/01/92	140101-1141	92-36204	31
L-87-2	(PS)	08/27/92	140101-1126	92-33686	31
L-87-3	(PS)	08/27/92	140101-1121	92-33681	31
L-87-5	(PS)	08/27/92	140101-1125	92-33685	31

Explanation

(PS) - Primary Sample

(FD) - Field Duplicate

(LD) - Laboratory Duplicate

(FS) - Field Split to a Second Laboratory

Table 1 (cont.): Groundwater medium analytical suites for samples collected from 08/27/92 to 09/01/92

Sample Station	Date	Envirocon ID#	Lab ID #	EPA
				601
L-87-8 (PS)	08/27/92	140101-1127	92-33687	31
L-88-10 (PS)	08/28/92	140101-1132	92-33692	31
LS-11 (PS)	08/27/92	140101-1118	92-33679	31
LS-8 (PS)	08/27/92	140101-1117	92-33678	31

Explanation

- (PS) - Primary Sample
- (FD) - Field Duplicate
- (LD) - Laboratory Duplicate
- (FS) - Field Split to a Second Laboratory

2.0 EVALUATION OF BLANK ANALYSES

Four trip blanks were analyzed for this sampling round and no contaminants were found. Two laboratory blanks were analyzed for this sampling round and no contaminants were found. All the blank results are located at the end of this report.

3.0 EVALUATION OF DUPLICATE ANALYSES

Two field duplicates were collected during this sampling round. Field duplicates were collected at wells 89-3 and 89-4. One laboratory duplicate was analyzed for this sampling round. A laboratory duplicate was analyzed for the primary sample of well 90-6. No second laboratory splits were collected for this sample round. Table 2 lists the sample results for the August, 1992 quarterly sampling round which failed the duplicate comparison criteria.

Table 2: List of sample results which exceeded the relative percent difference value of 30%.

Sample Station	Chemical Name	Value	Dupl. Value	RPD %	Dupl. Type
89-3	Tetrachloroethene	170.0	420.0	84.7	Field

4.0 EVALUATION OF HOLDING TIMES

No holding times were exceeded for this sample round.

5.0 EVALUATION OF MATRIX AND SURROGATE SPIKE RESULTS

The matrix spike recoveries were within recovery limits. Surrogate spike recoveries were within recovery limits. U.S. Environmental Protection Agency water supply quality control samples were within recovery limits. The matrix spike, surrogate spike, and U.S. EPA water supply quality control samples are located at the end of this report.

6.0 Validation Level Assignments

Analytical results are acceptable for quantitative data analysis for this sampling round with the exception of the sample results listed in Table 3 (unusable results).

Table 3: List of sample results which have been validated as unusable.

Sample Station	Sample Type	Parameter	Reason
89-3	Primary Sample	Tetrachloroethene	Duplicate Comparison
89-3	Field Duplicate	Tetrachloroethene	Duplicate Comparison

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-36200
DATE: 10/02/92 crp

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OCT 05 1992

ENVIRONMENTAL
LIVINGSTON, MT.

WATER ANALYSIS

Livingston/BN, 140101-1137
Sampled 09/01/92 @ 0840
Submitted 09/02/92
Analyzed 09/15/92

Lip Blank

CONSTITUENTµg/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	< 0.50
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-36200 dup
DATE: 10/02/92 crp

RECEIVED

OCT 05 1992

ENVIROCON, Inc.
Livingston, MT

QUALITY ASSURANCE - DUPLICATE ANALYSIS

Livingston/BN, 140101-1137
Sampled 09/01/92 @ 0840
Submitted 09/02/92
Analyzed 09/18/92

Drip Blank

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	< 0.50
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.



ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-735-4489

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO: Blank
DATE: 09/23/92 afSOLVED
Sep 25 1992
ENVIROCON, Inc.
Envirocon, Inc.WATER ANALYSISMethod Blank
Analyzed 09/04/92CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	< 0.50
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: Blank
DATE: 10/02/92 crp

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OCT 05 1992
ENVIRONMENTAL
LIVINGSTON, INC.

WATER ANALYSIS

Method Blank
Analyzed 09/15/92

CONSTITUENTµg/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	< 0.50
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO.: 92-33681
DATE: 09/23/92 af

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25 1992
ENVIROCON, Inc.
Livingston, MT

QUALITY ASSURANCE SPIKE ANALYSIS

This Quality Assurance Spike sample was analyzed 09/16/92 with Lab No. 92-33681 with the following results for Envirocon:

<u>Constituent</u>	Spike <u>Amount, µg/l</u>	<u>P (%)</u>	<u>Range for P (%)</u>
Chlorobenzene	50	103	60-140
1,2-Dichlorobenzene	50	102	60-140
cis-1,2-Dichloroethylene	50	121	60-140
trans-1,2-Dichloroethylene	50	107	60-140
1,2-Dichloropropane	50	110	60-140
Ethylbenzene	50	96	60-140
Styrene	50	91	60-140
Tetrachloroethylene	50	86	60-140
Toluene	50	109	60-140
o-Xylene	50	93	60-140
p-Xylene	50	96	60-140

P = Percent recovery measured.

REMARKS: Sample was diluted 10x before spiking due to the level of constituents in the matrix.



ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-735-4489

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO.: 92-33691
DATE: 09/23/92 af

RECEIVED
Sept 25 1992
ENVIROCON, Inc.
Livingston, MT

QUALITY ASSURANCE SPIKE ANALYSIS

This Quality Assurance Spike sample was analyzed 09/10/92 with Lab No. 92-33691 with the following results for Envirocon:

<u>Constituent</u>	Spike <u>Amount, µg/l</u>	<u>P (%)</u>	<u>Range for P (%)</u>
Chlorobenzene	5.0	128	60-140
1,2-Dichlorobenzene	5.0	101	60-140
cis-1,2-Dichloroethylene	5.0	135	60-140
trans-1,2-Dichloroethylene	5.0	135	60-140
1,2-Dichloropropane	5.0	104	60-140
Ethylbenzene	5.0	102	60-140
Styrene	5.0	94	60-140
Tetrachloroethylene	5.0	136	60-140
Toluene	5.0	121	60-140
o-Xylene	5.0	100	60-140
p-Xylene	5.0	100	60-140

P = Percent recovery measured.

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO.: 92-36201
DATE: 10/02/92 cr

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OCT 05 1992
ENVIRONMENTAL
LIVINGSTON, MT

QUALITY ASSURANCE SPIKE ANALYSIS

This Quality Assurance Spike sample was analyzed 09/30/92 with your lab no. 92-36201 with the following results:

<u>Parameter</u>	Spike <u>Amount, µg/l</u>	<u>P (%)</u>	<u>Range for P (%)</u>
Chlorobenzene	500	126	60-140
1,2-Dichlorobenzene	500	100	60-140
cis-1,2-Dichloroethylene	500	123	60-140
trans-1,2-Dichloroethylene	500	111	60-140
1,2-Dichloropropane	500	112	60-140
Ethylbenzene	500	94	60-140
Styrene	500	92	60-140
Tetrachloroethylene	500	122	60-140
Toluene	500	120	60-140
o-Xylene	500	95	60-140
p-Xylene	500	92	60-140

P = Percent recovery measured.

NOTE: Sample was diluted 100x before spiking.

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO.: 92-33677-93
DATE: 09/23/92 af

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ENVIROCON, Inc.
Livingston, MT

WATER VOLATILE SURROGATE RECOVERY

10 µg/l Surrogate Standard Spike

<u>SAMPLE NO.</u>	<u>-----% recovery-----</u>		
	<u>S1</u> <u>(TOL) #</u>	<u>S2</u> <u>(BFB) #</u>	<u>S3</u> <u>(DCE) #</u>
92-33677	101	101	93
92-33677 dup	101	101	117
92-33678	113	104	96
92-33679	86	104	119
92-33680	100	97	105
92-33681	98	104	91
92-33682	100	99	100
92-33683	99	97	100
92-33684	101	99	102
92-33685	101	102	99
92-33686	99	97	94
92-33687	99	98	95
92-33688	101	102	97
92-33689	114	96	110
92-33690	110	98	107
92-33690 dup	114	95	109
92-33691	104	100	112
92-33692	110	96	112
92-33693	111	99	109
Method Blank	103	101	102

<u>QC LIMITS, % Recovery</u>	
S1 (TOL) = Toluene-d8	80-120
S2 (BFB) = Bromofluorobenzene	80-120
S3 (DCE) = 1,2-Dichloroethane-d4	80-120

#Column to be used to flag recovery values with an asterisk.

*Values outside of contract required QC limits.



ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-735-4489

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO.: 92-36200 -04
DATE: 10/02/92 cRECEIVED
OCT 05 1992ENVROCON,
Livingston, Mt.WATER VOLATILE SURROGATE RECOVERY

10 µg/l Surrogate Standard Spike

<u>SAMPLE NO.</u>	-----% recovery-----		
	S1 <u>(TOL)</u> #	S2 <u>(BFB)</u> #	S3 <u>(DCE)</u> #
92-36200	100	98	87
92-36200 dup	96	94	114
92-36201	100	102	100
92-36202	101	100	97
92-36203	101	103	98
92-36204	100	85	98
Method Blank	100	90	111

S1 (TOL) = Toluene-d8
S2 (BFB) = Bromofluorobenzene
S3 (DCE) = 1,2-Dichloroethane-d4

QC LIMITS, % Recovery
80-120
80-120
80-120

#Column to be used to flag recovery values with an asterisk.

*Values outside of contract required QC limits.



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LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO.: 92-33677-93
DATE: 09/23/92 af

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SEP 25 1992
ENVIROCON, Inc.
Livingston, MT

EPA WATER SUPPLY QUALITY CONTROL SAMPLE

Volatile Organic Contaminants

This EPA Quality Control sample was analyzed 09/08/92 with Lab Nos. 92-33677 to 92-33693 with the following results for Envirocon:

<u>Parameter</u>	<u>True Value, µg/l</u>	<u>P (%)</u>	<u>Range for P (%)</u>
1,1-Dichloroethene	5.0	138	60-140
trans-1,2-Dichloroethene	5.0	136	60-140
1,2-Dichloroethane	5.0	125	60-140
Carbon Tetrachloride	5.0	132	60-140
1,2-Dichloropropane	5.0	140	60-140
1,1,2-Trichloroethane	5.0	128	60-140
Tetrachloroethylene	5.0	122	60-140
Chlorobenzene	5.0	130	60-140
Ethylbenzene	5.0	112	60-140
1,3-Dichlorobenzene	5.0	114	60-140
1,4-Dichlorobenzene	5.0	112	60-140

P = Percent recovery measured.

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO.: 92-36200 -04
DATE: 10/02/92 cr

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OCT 05 1992
ENVIROCON,
LIVINGSTON, MT

EPA WATER SUPPLY QUALITY CONTROL SAMPLE

Volatile Organic Contaminants

This EPA Quality Control sample was analyzed with your lab nos. 92-36200 to 92-36204 with the following results:

<u>Parameter</u>	<u>True Value, µg/l</u>	<u>P (%)</u>	<u>Range for P (%)</u>
1,1-Dichloroethene	5.0	130	60-140
trans-1,2-Dichloroethene	5.0	130	60-140
1,2-Dichloroethane	5.0	124	60-140
Carbon Tetrachloride	5.0	140	60-140
1,2-Dichloropropane	5.0	138	60-140
1,1,2-Trichloroethane	5.0	120	60-140
Tetrachloroethene	5.0	132	60-140
Chlorobenzene	5.0	128	60-140
Ethylbenzene	5.0	117	60-140
1,3-Dichlorobenzene	5.0	115	60-140
1,4-Dichlorobenzene	5.0	112	60-140

P = Percent recovery measured.

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-36204
DATE: 10/02/92

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OCT 05 1992

Envirocon, Inc.
Livingston, MT

WATER ANALYSIS

Livingston/BN, 140101-1141
Sampled 09/01/92 @ 1445
Submitted 09/02/92
Analyzed 09/15/92

H2O-17 ✓

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	.....	< 1.0
Bromoform	.....	< 1.0
Bromomethane	.....	< 1.0
Carbon tetrachloride	.....	< 0.50
Chlorobenzene	.....	840 *
Chloroethane	.....	< 1.0
2-Chloroethylvinyl ether	.....	< 1.0
2-Chlorotoluene	.....	39 **
Chloroform	.....	< 1.0
Chloromethane	.....	< 1.0
Dibromochloromethane	.....	< 1.0
1,2-Dichlorobenzene	.....	100 **
1,3-Dichlorobenzene	.....	8.7
1,4-Dichlorobenzene	.....	71 **
1,1-Dichloroethane	.....	< 1.0
1,2-Dichloroethane	.....	< 0.50
1,1-Dichloroethene	.....	< 0.50
cis-1,2-Dichloroethene	.....	9.5
trans-1,2-Dichloroethene	.....	< 1.0
1,2-Dichloropropane	.....	< 1.0
cis-1,3-Dichloropropene	.....	< 1.0
trans-1,3-Dichloropropene	.....	< 1.0
Methylene chloride	.....	< 1.0
1,1,2,2-Tetrachloroethane	.....	< 1.0
Tetrachloroethene	.....	86 **
1,1,1-Trichloroethane	.....	< 0.50
1,1,2-Trichloroethane	.....	< 1.0
Trichloroethene	.....	16
Trichlorofluoromethane	.....	< 1.0
Vinyl chloride	.....	< 0.50
Dichlorodifluoromethane	.....	< 1.0

* Value derived from a 100x dilution.

** Value derived from a 25x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

COMPLETE ENVIRONMENTAL ANALYTICAL SERVICE

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-36203
DATE: 10/02/92 cr

RECEIVED
OCT 05 1992

ENVROCON, Inc.
Livingston, MT

WATER ANALYSIS

Livingston/BN, 140101-1140
Sampled 09/01/92 @ 1156
Submitted 09/02/92
Analyzed 09/15/92

#5

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	< 0.50
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m 1054
1089
1089

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-36202
DATE: 10/02/92 crp

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Livingston, MT

WATER ANALYSIS

Livingston/BN, 140101-1139
Sampled 09/01/92 @ 1040
Submitted 09/02/92
Analyzed 09/15/92

89-3
Duf

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
2-Chloroethylvinyl ether	<1.0
2-Chlorotoluene	<1.0
Chloroform	<1.0
Chloromethane	<1.0
Dibromochloromethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	<1.0
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Methylene chloride	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	420 *
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	0.74
Trichlorofluoromethane	<1.0
Vinyl chloride	<0.50
Dichlorodifluoromethane	<1.0

* Value derived from a 25x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-36201
DATE: 10/02/92 crp

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OCT 05/92

*ENVROCON, Inc.
Livingston, MT*

WATER ANALYSIS

Livingston/BN, 140101-1138
Sampled 09/01/92 @ 1034
Submitted 09/02/92
Analyzed 09/15/92

R9-2

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	170 *
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	0.90
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

* Value derived from a 100x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m 10/5/92
d b 10/8/92

LABORATORY REPORT

TO: Steve Sasse
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-36200
DATE: 10/02/92 crp

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ENVIROCON, Inc.
Livingston, Mt.

WATER ANALYSIS

Livingston/BN, 140101-1137
Sampled 09/01/92 @ 0840
Submitted 09/02/92
Analyzed 09/15/92

Jug Blank

CONSTITUENTµg/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	< 0.50
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.



ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-735-4489m 19 5/92
db 10 8/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO: 92-33693
DATE: 09/23/92 aRECEIVED
CLB 25 1992ENVIROCON, Inc.
Livingston, MTWATER ANALYSISLivingston/BN
140101-1133

92-1

Sampled 08/28/92 @ 1945

Submitted 08/31/92

Analyzed 09/09/92

CONSTITUENT

ug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	12
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	220 *
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

✓

* Value derived from a 100x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m 10/5/92
10/8/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33692
DATE: 09/23/92

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SEP 25 1992

ENVIRONMENTAL
LIVINGSTON, MT

WATER ANALYSIS

Livingston/BN
140101-1132
Sampled 08/28/92 @ 1915
Submitted 08/31/92
Analyzed 09/09/92

L-88-10

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	7.1
Chloroethane	<1.0
2-Chloroethylvinyl ether	<1.0
2-Chlorotoluene	2.2
Chloroform	<1.0
Chloromethane	<1.0
Dibromochloromethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	0.90
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	100 *
trans-1,2-Dichloroethene	1.1
1,2-Dichloropropane	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Methylene chloride	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	71 *
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	14 *
Trichlorofluoromethane	<1.0
Vinyl chloride	<0.50
Dichlorodifluoromethane	<1.0

* Value derived from a 10x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.



ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-735-4489m 10/5/92
10/8/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO: 92-33691
DATE: 09/23/92 af

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SEP 25 1992

ENVIROCON, Inc.
Livingston, MtWATER ANALYSISLivingston/BN
140101-1131
Sampled 08/28/92 @ 1820
Submitted 08/31/92
Analyzed 09/09/92

JZ-3

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	1.2
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m/d 5/92
ab 10/8/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33690
DATE: 09/23/92

RECEIVED

SEP 25 1992

ENVIROCON, Inc.
Livingston, Mt.

WATER ANALYSIS

Livingston/BN
140101-1130

Sampled 08/28/92 @ 1735

Submitted 08/31/92

Analyzed 09/10/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	.....	<1.0
Bromoform	.....	<1.0
Bromomethane	.....	<1.0
Carbon tetrachloride	.....	<0.50
Chlorobenzene	.....	<1.0
Chloroethane	.....	<1.0
2-Chloroethylvinyl ether	.....	<1.0
2-Chlorotoluene	.....	<1.0
Chloroform	.....	<1.0
Chloromethane	.....	<1.0
Dibromochloromethane	.....	<1.0
1,2-Dichlorobenzene	.....	<1.0
1,3-Dichlorobenzene	.....	<1.0
1,4-Dichlorobenzene	.....	<0.50
1,1-Dichloroethane	.....	<1.0
1,2-Dichloroethane	.....	<0.50
1,1-Dichloroethene	.....	<0.50
cis-1,2-Dichloroethene	.....	<1.0
trans-1,2-Dichloroethene	.....	<1.0
1,2-Dichloropropane	.....	<1.0
cis-1,3-Dichloropropene	.....	<1.0
trans-1,3-Dichloropropene	.....	<1.0
Methylene chloride	.....	<1.0
1,1,2,2-Tetrachloroethane	.....	<1.0
Tetrachloroethene	.....	0.54
1,1,1-Trichloroethane	.....	<0.50
1,1,2-Trichloroethane	.....	<1.0
Trichloroethene	.....	<0.50
Trichlorofluoromethane	.....	<1.0
Vinyl chloride	.....	<0.50
Dichlorodifluoromethane	.....	<1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

m 10/6/92
16/10/89TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO: 92-33690 dup
DATE: 09/23/92 afRECEIVED
SEP 25 1992ENVIROCON, Inc.
Livingston, MTQUALITY ASSURANCE - DUPLICATE ANALYSISLivingston/BN
140101-1130
Sampled 08/28/92 @ 1735
Submitted 08/31/92
Analyzed 09/10/9240-6
fab dup?CONSTITUENTµg/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	0.54
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m 10/5/92
b 10/5/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33689
DATE: 09/23/92 af
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SEP 25 1992

WATER ANALYSISLivingston/BN
140101-1129

07-8

ENVIROCON, Inc.
Livingston, Mt.

Sampled 08/28/92 @ 1530

Submitted 08/31/92

Analyzed 09/09/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	18
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	41 *
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	8.4
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

* Value derived from a 5x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m 1991
dh 10/18/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33688
DATE: 09/23/92 af

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SEP 25 1992

ENVIROCON, Inc.
Livingston, Mt.

WATER ANALYSIS

Livingston/BN
140101-1128

Sampled 08/28/92 @ 1405

Submitted 08/31/92

Analyzed 09/05/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
2-Chloroethylvinyl ether	<1.0
2-Chlorotoluene	<1.0
Chloroform	<1.0
Chloromethane	<1.0
Dibromochloromethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	<1.0
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Methylene chloride	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	2.2
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	<0.50
Trichlorofluoromethane	<1.0
Vinyl chloride	<0.50
Dichlorodifluoromethane	<1.0

✓

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33687
DATE: 09/23/92 af

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SEP 25 1992

ENVIROCON, Inc.
Livingston, Mt.

WATER ANALYSIS

Livingston/BN
140101-1127

Sampled 08/27/92 @ 1953
Submitted 08/31/92
Analyzed 09/04/92

CONSTITUENTµg/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	6.2
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	0.93
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

v

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m 10/3/92
1610 8/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33686
DATE: 09/23/92 af

RECEIVEDWATER ANALYSIS

Livingston/BN, 140101-1126
Sampled 08/27/92 @ 1840
Submitted 08/31/92
Analyzed 09/04/92

ENVIROCON, Inc.
Livingston, MTCONSTITUENT

µg/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	<10
Bromoform	<10
Bromomethane	<10
Carbon tetrachloride	<5.0
Chlorobenzene	77
Chloroethane	<10
2-Chloroethylvinyl ether	<10
2-Chlorotoluene	91
Chloroform	<10
Chloromethane	<10
Dibromochloromethane	<10
1,2-Dichlorobenzene	<10
1,3-Dichlorobenzene	<10
1,4-Dichlorobenzene	<5.0
1,1-Dichloroethane	<10
1,2-Dichloroethane	<5.0
1,1-Dichloroethene	<5.0
cis-1,2-Dichloroethene	310 *
trans-1,2-Dichloroethene	<10
1,2-Dichloropropane	<10
cis-1,3-Dichloropropene	<10
trans-1,3-Dichloropropene	<10
Methylene chloride	<10
1,1,2,2-Tetrachloroethane	<10
Tetrachloroethene	<5.0
1,1,1-Trichloroethane	<5.0
1,1,2-Trichloroethane	<10
Trichloroethene	7.6
Trichlorofluoromethane	<10
Vinyl chloride	<5.0
Dichlorodifluoromethane	<10

* Value derived from a 25x dilution.

REMARKS: Practical quantitation limit reflects a 10x dilution. The sample was diluted due to non-target compound sample matrix interference.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33685
DATE: 09/23/92 af

RECEIVED

SEP 25 1992

ENVIRONMENTAL
LIVINGSTON, MT.

WATER ANALYSIS

Livingston/BN
140101-1125

Sampled 08/27/92 @ 1805
Submitted 08/31/92
Analyzed 09/04/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	.....	<1.0
Bromoform	.....	<1.0
Bromomethane	.....	<1.0
Carbon tetrachloride	.....	<0.50
Chlorobenzene	.....	<1.0
Chloroethane	.....	<1.0
2-Chloroethylvinyl ether	.....	<1.0
2-Chlorotoluene	.....	<1.0
Chloroform	.....	<1.0
Chloromethane	.....	<1.0
Dibromochloromethane	.....	<1.0
1,2-Dichlorobenzene	.....	<1.0
1,3-Dichlorobenzene	.....	<1.0
1,4-Dichlorobenzene	.....	<0.50
1,1-Dichloroethane	.....	<1.0
1,2-Dichloroethane	.....	<0.50
1,1-Dichloroethene	.....	<0.50
cis-1,2-Dichloroethene	.....	4.1
trans-1,2-Dichloroethene	.....	<1.0
1,2-Dichloropropane	.....	<1.0
cis-1,3-Dichloropropene	.....	<1.0
trans-1,3-Dichloropropene	.....	<1.0
Methylene chloride	.....	<1.0
1,1,2,2-Tetrachloroethane	.....	<1.0
Tetrachloroethene	.....	160 *
1,1,1-Trichloroethane	.....	<0.50
1,1,2-Trichloroethane	.....	<1.0
Trichloroethene	.....	9.0
Trichlorofluoromethane	.....	<1.0
Vinyl chloride	.....	<0.50
Dichlorodifluoromethane	.....	<1.0

* Value derived from a 10x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33684
DATE: 09/23/92 af

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SEP 25 1992

ENVIRONMENTAL
LIVINGSTON, MT.

WATER ANALYSIS

Livingston/BN
140101-1124

Sampled 08/27/92 @ 1653

Submitted 08/31/92

Analyzed 09/04/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
2-Chloroethylvinyl ether	<1.0
2-Chlorotoluene	<1.0
Chloroform	<1.0
Chloromethane	<1.0
Dibromochloromethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	3.3
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Methylene chloride	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	170 *
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	9.1
Trichlorofluoromethane	<1.0
Vinyl chloride	<0.50
Dichlorodifluoromethane	<1.0 ✓

* Value derived from a 10x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33683
DATE: 09/23/92 af

RECEIVED

SEP 25 1992

ENVIROCON, Inc.
Livingston, MT

WATER ANALYSIS

Livingston/BN
140101-1123
Sampled 08/27/92 @ 1605
Submitted 08/31/92
Analyzed 09/04/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	.....	<1.0
Bromoform	.....	<1.0
Bromomethane	.....	<1.0
Carbon tetrachloride	.....	<0.50
Chlorobenzene	.....	<1.0
Chloroethane	.....	<1.0
2-Chloroethylvinyl ether	.....	<1.0
2-Chlorotoluene	.....	<1.0
Chloroform	.....	<1.0
Chloromethane	.....	<1.0
Dibromochloromethane	.....	<1.0
1,2-Dichlorobenzene	.....	<1.0
1,3-Dichlorobenzene	.....	<1.0
1,4-Dichlorobenzene	.....	<0.50
1,1-Dichloroethane	.....	<1.0
1,2-Dichloroethane	.....	<0.50
1,1-Dichloroethene	.....	<0.50
cis-1,2-Dichloroethene	.....	4.9
trans-1,2-Dichloroethene	.....	<1.0
1,2-Dichloropropane	.....	<1.0
cis-1,3-Dichloropropene	.....	<1.0
trans-1,3-Dichloropropene	.....	<1.0
Methylene chloride	.....	<1.0
1,1,2,2-Tetrachloroethane	.....	<1.0
Tetrachloroethene	.....	200 *
1,1,1-Trichloroethane	.....	<0.50
1,1,2-Trichloroethane	.....	<1.0
Trichloroethene	.....	3.4
Trichlorofluoromethane	.....	<1.0
Vinyl chloride	.....	<0.50
Dichlorodifluoromethane	.....	<1.0

* Value derived from a 10x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

m 10/5/92
do 10/10/92

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33682
DATE: 09/23/92 af

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SF: 25 1992

ENVIROCON, Inc.
Livingston, Mt.WATER ANALYSIS

Livingston/BN
140101-1122
Sampled 08/27/92 @ 1600
Submitted 08/31/92
Analyzed 09/04/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	<1.0
Bromoform	<1.0
Bromomethane	<1.0
Carbon tetrachloride	<0.50
Chlorobenzene	<1.0
Chloroethane	<1.0
2-Chloroethylvinyl ether	<1.0
2-Chlorotoluene	<1.0
Chloroform	<1.0
Chloromethane	<1.0
Dibromochloromethane	<1.0
1,2-Dichlorobenzene	<1.0
1,3-Dichlorobenzene	<1.0
1,4-Dichlorobenzene	<0.50
1,1-Dichloroethane	<1.0
1,2-Dichloroethane	<0.50
1,1-Dichloroethene	<0.50
cis-1,2-Dichloroethene	4.6
trans-1,2-Dichloroethene	<1.0
1,2-Dichloropropane	<1.0
cis-1,3-Dichloropropene	<1.0
trans-1,3-Dichloropropene	<1.0
Methylene chloride	<1.0
1,1,2,2-Tetrachloroethane	<1.0
Tetrachloroethene	160 *
1,1,1-Trichloroethane	<0.50
1,1,2-Trichloroethane	<1.0
Trichloroethene	3.2
Trichlorofluoromethane	<1.0
Vinyl chloride	<0.50
Dichlorodifluoromethane	<1.0

* Value derived from a 10x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

m 10/92
b 10/92TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO: 92-33681
DATE: 09/23/92 afWATER ANALYSISLivingston/BN
140101-1121
Sampled 08/27/92 @ 1515
Submitted 08/31/92
Analyzed 09/04/92

RECEIVED

L-71-3
SEP 25 1992ENVIROCON, Inc.
Livingston, Mt.CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	.....	< 1.0
Bromoform	.....	< 1.0
Bromomethane	.....	< 1.0
Carbon tetrachloride	.....	< 0.50
Chlorobenzene	.....	1.1
Chloroethane	.....	< 1.0
2-Chloroethylvinyl ether	.....	< 1.0
2-Chlorotoluene	.....	< 1.0
Chloroform	.....	< 1.0
Chloromethane	.....	< 1.0
Dibromochloromethane	.....	< 1.0
1,2-Dichlorobenzene	.....	< 1.0
1,3-Dichlorobenzene	.....	< 1.0
1,4-Dichlorobenzene	.....	< 0.50
1,1-Dichloroethane	.....	< 1.0
1,2-Dichloroethane	.....	< 0.50
1,1-Dichloroethene	.....	< 0.50
cis-1,2-Dichloroethene	.....	17
trans-1,2-Dichloroethene	.....	< 1.0
1,2-Dichloropropane	.....	< 1.0
cis-1,3-Dichloropropene	.....	< 1.0
trans-1,3-Dichloropropene	.....	< 1.0
Methylene chloride	.....	< 1.0
1,1,2,2-Tetrachloroethane	.....	< 1.0
Tetrachloroethene	.....	80 *
1,1,1-Trichloroethane	.....	< 0.50
1,1,2-Trichloroethane	.....	< 1.0
Trichloroethene	.....	9.7
Trichlorofluoromethane	.....	< 1.0
Vinyl chloride	.....	< 0.50
Dichlorodifluoromethane	.....	< 1.0

* Value derived from a 10x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

COMPLETE ENVIRONMENTAL ANALYTICAL SERVICE



ENERGY LABORATORIES, INC.

P.O. BOX 30916 • 1107 SOUTH BROADWAY • BILLINGS MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-735-4489mid 92
db 10/89

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047LAB NO: 92-33680
DATE: 09/23/92 af

RECEIVED

SEP 25 1992

ENVIROCON, Inc.
Livingston, Mt.WATER ANALYSISLivingston/BN
140101-1120

Sampled 08/27/92 @ 1428

Submitted 08/31/92

Analyzed 09/09/92

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	< 1.0
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	< 0.50
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	< 0.50
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

NOTE: This analysis is equivalent to EPA Methods 601/8010.

COMPLETE ENVIRONMENTAL ANALYTICAL SERVICE

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33679
DATE: 09/23/92 af

RECEIVED

SEP 25 1992

ENVIROCON, Inc.
Livingston, Mt.

WATER ANALYSIS

Livingston/BN
140101-1118

Sampled 08/27/92 @ 1255

Submitted 08/31/92

Analyzed 09/04/92

CONSTITUENT µg/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	230 *
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	2.2
1,4-Dichlorobenzene	31 *
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	54 *
trans-1,2-Dichloroethene	13
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	14 *
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	14
Trichlorofluoromethane	< 1.0
Vinyl chloride	0.83
Dichlorodifluoromethane	< 1.0

* Value derived from a 25x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

LABORATORY REPORT

TO: John Mills
ADDRESS: Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

LAB NO: 92-33678
DATE: 09/23/92 af

WATER ANALYSIS
Livingston/BN
140101-1117
Sampled 08/27/92 @ 1213
Submitted 08/31/92
Analyzed 09/04/92

RECEIVED
SEP 27 1992
ENVIROCON, Inc.
Livingston, Mt.

CONSTITUENTug/l

Purgeable Halocarbons (EPA Method 8260)

Bromodichloromethane	< 1.0
Bromoform	< 1.0
Bromomethane	< 1.0
Carbon tetrachloride	< 0.50
Chlorobenzene	< 1.0
Chloroethane	< 1.0
2-Chloroethylvinyl ether	< 1.0
2-Chlorotoluene	< 1.0
Chloroform	< 1.0
Chloromethane	< 1.0
Dibromochloromethane	< 1.0
1,2-Dichlorobenzene	< 1.0
1,3-Dichlorobenzene	< 1.0
1,4-Dichlorobenzene	< 0.50
1,1-Dichloroethane	< 1.0
1,2-Dichloroethane	< 0.50
1,1-Dichloroethene	< 0.50
cis-1,2-Dichloroethene	12
trans-1,2-Dichloroethene	< 1.0
1,2-Dichloropropane	< 1.0
cis-1,3-Dichloropropene	< 1.0
trans-1,3-Dichloropropene	< 1.0
Methylene chloride	< 1.0
1,1,2,2-Tetrachloroethane	< 1.0
Tetrachloroethene	66 *
1,1,1-Trichloroethane	< 0.50
1,1,2-Trichloroethane	< 1.0
Trichloroethene	4.7
Trichlorofluoromethane	< 1.0
Vinyl chloride	< 0.50
Dichlorodifluoromethane	< 1.0

* Value derived from a 5x dilution.

NOTE: This analysis is equivalent to EPA Methods 601/8010.

COMPLETE ENVIRONMENTAL ANALYTICAL SERVICE



ENERGY LABORATORIES, INC.

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FAX (406) 252-6069 • 1-800-735-4489

m 10/5/93
Jb 10/8/93

September 23, 1992

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SEP 25 1992
ENVIROCON, Inc.
Livingston, Mt.

Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

On August 31, 1992 these samples, represented by our laboratory numbers 92-33677 to 92-33693, were submitted to our laboratory for analysis.

The test results and quality assurance were reviewed and approved by the undersigned.

Reviewed by

A handwritten signature in black ink that reads "Deborah P. Gunn".



ENERGY LABORATORIES, INC.

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m10/5/92
do 10/8/92

October 2, 1992

RECEIVED
OCT 05 1992

*ENVIROCON, Inc.
Livingston, MT*

Mr. Steve Sasse
Envirocon, Inc.
P.O. Box 1154
Livingston, MT 59047

On September 2, 1992, these samples, represented by our laboratory numbers 92-36200 to 92-36204, were submitted to our laboratory for analysis.

The test results and quality assurance were reviewed and approved by the undersigned.

Reviewed by:

A handwritten signature in black ink, appearing to read "Steve Sasse". It is positioned above a horizontal line.

